

4. (Original) The method of claim 3, wherein  
the radius of each electron according to the de Broglie wavelength equals  
the radius of each neutral atom.
5. (Currently Amended) The method of claim 20 4, wherein the step of applying energy  
from an energy source to said element of matter having a spatial velocity  
function having negative curvature comprises,  
the acceleration of the negatively curved ~~element of matter~~ electron by an  
electric field.
6. (Currently Amended) The method of claim 20 4, wherein the step of receiving said  
repulsive force on said field source from said ~~element of matter~~ electron in  
response to the force provided by said gravitating mass and ~~said element of~~  
~~matter~~ electron comprises,  
providing an electric field which produces a force on the ~~element of matter~~  
electron having a spatial velocity function having negative curvature which is in a  
direction opposite that of the force of the gravitating body on the ~~element of~~  
~~matter~~ electron.
7. (Currently Amended) The method of claim 6, further including the step of applying  
the received repulsive force to a structure movable in relation to said gravitating  
~~means~~ mass.
8. (Currently Amended) The method of claim 7, further including the step of rotating  
said structure around an axis providing an angular momentum vector ~~of said~~  
~~circularly rotating structure~~ parallel to the central vector of the gravitational force  
by said gravitating mass.

9. (Original) The method of claim 8, further including the step of changing the orientation of said angular momentum vector to accelerate said structure through a trajectory parallel to the surface of said gravitating mass.

10. (Currently Amended) Apparatus for providing repulsion from a gravitating body comprising:

~~element of matter~~ electron;

means of forming said ~~element of matter~~ electron such that its spatial velocity function has negative curvature wherein a repulsive force away from said gravitating ~~mass~~ body is created;

means of applying energy to said ~~element of matter~~ electron having a spatial velocity function having negative curvature;

means of applying a field to said ~~element of matter~~ electron having a spatial velocity function having negative curvature;

a repulsive force developed by said ~~element of matter~~ electron having a spatial velocity function having negative curvature in response to said applied field is impressed on said means for applying the field in a direction away from said gravitating body.

11. (Canceled)

12. (Currently Amended) The ~~method~~ apparatus of claim 11, wherein the means of forming comprises

an electron beam and a neutral atom beam;

wherein the beams intersect such that the electrons form hyperbolic electrons.

13. (Currently Amended) The ~~method~~ apparatus of claim 12, wherein

the radius of each electron according to the de Broglie wavelength equals

the radius of each neutral atom.

14. (Currently Amended) The ~~method~~ apparatus of claim 10, wherein the means of applying energy from an energy source to said ~~element of matter~~ electron having a spatial velocity function having negative curvature comprises,  
a means to accelerate the negatively curved ~~element of matter~~ electron.
15. (Currently Amended) The apparatus ~~means~~ of claim 14 wherein the means to accelerate the negatively curved ~~element of matter~~, electron comprises a means to provide an electric field.
16. (Currently Amended) The apparatus of claim 10, wherein the means to apply a field to provide a repulsive force against the ~~element of matter~~ electron having a spatial velocity function having negative curvature and receive the repulsive force on said ~~element of matter~~ electron by said gravitating mass comprises,  
an electric field means which produces a force on the said ~~element of matter~~ electron having a spatial velocity function having negative curvature which is in a direction opposite that of the force of the gravitating body on the ~~element of matter~~ electron.
17. (Currently Amended) The apparatus of claim 10, further including  
a circularly rotatable structure having a moment of inertia; and  
means for applying said repulsive force to circulating rotatable structure,  
wherein  
the an angular momentum vector of said circularly rotatable structure is parallel to the a central vector of the gravitational force produced by said gravitating body.

18. (Original) The apparatus of claim 17, further including
- a means to change the orientation of said angular momentum vector to accelerate said circularly rotatable structure along a trajectory parallel to the surface of said gravitating mass.
19. (Currently Amended) Apparatus for providing a repulsion from a gravitating body having:
- an element of matter having a spatial velocity function having negative curvature which experiences a repulsive force in the presence of the gravitating body; and
  - means for applying a field to said ~~element of matter~~ electron having a spatial velocity function having negative curvature, wherein
  - a repulsive force is developed by said ~~element of matter~~ electron having a spatial velocity function having negative curvature in response to said applied field and is impressed on said means for applying the field in a direction away from said gravitating body.
20. (New) A method of providing a repulsive force from a gravitating mass comprising the steps of:
- providing an electron;
  - forming said electron into a hyperbolic electron wherein its spatial velocity function has negative curvature wherein a repulsive force away from said gravitating mass is created;
  - applying energy from an energy source to said hyperbolic electron having a spatial velocity function having negative curvature;
  - applying a field from a field source to said hyperbolic electron having a spatial velocity function having negative curvature;
  - receiving the repulsive force on said field source from the said hyperbolic electron in response to the force provided by said gravitating mass and said element of matter.